

106TH CONGRESS  
2D SESSION

# S. 2362

To amend the Clean Air Act to direct the Administrator of the Environmental Protection Agency to consider risk assessments and cost-benefit analyses as part of the process of establishing a new or revised air quality standard.

---

## IN THE SENATE OF THE UNITED STATES

APRIL 5, 2000

Mr. VOINOVICH (for himself, Mr. BREAUX, Mr. INHOFE, and Ms. LANDRIEU) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

---

## A BILL

To amend the Clean Air Act to direct the Administrator of the Environmental Protection Agency to consider risk assessments and cost-benefit analyses as part of the process of establishing a new or revised air quality standard.

1       *Be it enacted by the Senate and House of Representa-*  
2       *tives of the United States of America in Congress assembled,*

3       **SECTION 1. SHORT TITLE.**

4       This Act may be cited as the “Air Quality Standard  
5       Improvement Act of 2000”.

6       **SEC. 2. PURPOSES.**

7       The purposes of this Act are—

1           (1) to establish more effective environmental  
2 standards to continue to safeguard public health and  
3 the environment;

4           (2) to promote better resource allocation to en-  
5 sure that serious risks to air quality are addressed  
6 first;

7           (3) to improve the ability of the Administrator  
8 of the Environmental Protection Agency to use sci-  
9 entific and economic analysis in developing air qual-  
10 ity standards;

11          (4) to yield increased public health and environ-  
12 mental benefits and more effective protections while  
13 minimizing costs;

14          (5) to require that relevant qualitative and  
15 quantitative information be considered in the process  
16 of evaluating the costs and benefits of air quality  
17 standards;

18          (6) to promote the right of the public to know  
19 about the costs and benefits of air standards, the  
20 risks addressed, the risks reduced, and the quality of  
21 scientific and economic analysis used to support de-  
22 cisions; and

23          (7) to require the Administrator of the Environ-  
24 mental Protection Agency to conduct risk assess-  
25 ments and cost-benefit analyses as part of the proc-

1       ess of establishing a new or revised air quality  
2       standard.

3   **SEC. 3. RISK ASSESSMENT AND COST-BENEFIT ANALYSIS.**

4       The Clean Air Act (42 U.S.C. 7401 et seq.) is amend-  
5   ed by adding at the end the following:

6    **“TITLE VII—RISK ASSESSMENT**  
7    **AND COST-BENEFIT ANALYSIS**

8   **“SEC. 701. DEFINITION OF AIR QUALITY STANDARD.**

9       “In this title, the term ‘air quality standard’ means—

10           “(1) a national ambient air quality standard es-  
11       ablished under section 109 (including the setting of  
12       any emissions budget for purposes of attaining or  
13       maintaining any national ambient air quality stand-  
14       ard);

15           “(2) an increment or ceiling for the prevention  
16       of significant deterioration established under section  
17       163;

18           “(3) regulations established under section 169A  
19       to address the regional haze or other impairment of  
20       visibility by manmade air pollution in a mandatory  
21       class I Federal area;

22           “(4) any finding or emission limitation deter-  
23       mined under section 126;

24           “(5) any emission standard or requirement that  
25       applies to on-road and nonroad mobile sources (in-

1 including aircraft engine standards) established under  
2 title II;

3 “(6) any requirement that imposes a limitation  
4 on the quality of fuel used in mobile sources;

5 “(7) any emission limitation or emission budget  
6 for sulfur dioxide or nitrogen oxides established  
7 under title IV;

8 “(8) any preconstruction review requirement  
9 that regulates new sources or major modifications of  
10 existing sources in attainment or nonattainment  
11 areas;

12 “(9) the setting of any emissions budget or  
13 other requirement for purposes of attaining or main-  
14 taining any national ambient air quality standard  
15 under section 110;

16 “(10) any new source performance standard,  
17 existing source performance standard, or design,  
18 equipment, work practice, or operational standard  
19 established or revised under section 111;

20 “(11) any standard to protect public health and  
21 the environment described in section 112(f);

22 “(12) any new regulation applicable to an elec-  
23 tric utility steam generating unit under section  
24 112(n);

1 “(13) the designation of a pollutant under sec-  
 2 tion 115 as causing or contributing to air pollution  
 3 that may reasonably be anticipated to endanger pub-  
 4 lic health or welfare in a foreign country;

5 “(14) any air pollution control technique infor-  
 6 mation, transportation planning guidelines, informa-  
 7 tion on procedures and methods to reduce mobile  
 8 source air pollution, or control technique guidelines  
 9 issued under sections 108 and 183;

10 “(15) any identification of attainment dates for  
 11 national ambient air quality standards under part D;

12 “(16) any identification of control measures for  
 13 the reduction of interstate ozone air pollution under  
 14 section 184; and

15 “(17) any identification of reasonably available  
 16 control measures and best available control measures  
 17 for particulate matter under section 190.

18 **“SEC. 702. RISK ASSESSMENT, MANAGEMENT, AND COMMU-**  
 19 **NICATION.**

20 “(a) USE OF SCIENCE IN DECISIONMAKING.—In car-  
 21 rying out this Act, (including establishing a new or revised  
 22 air quality standard under this Act), the Administrator  
 23 shall base any scientific or technical conclusions on—

1           “(1) the best available, peer-reviewed science  
2           and supporting studies conducted in accordance with  
3           sound and objective scientific practices;

4           “(2) data collected by accepted methods or the  
5           best available methods (if the reliability of the meth-  
6           od and the nature of the decision justifies use of the  
7           data);

8           “(3) data (including the underlying research  
9           data) that have been made available to the public,  
10          subject to the exemptions under section 552 of title  
11          5, United States Code.

12          “(b) PUBLIC INFORMATION.—

13               “(1) IN GENERAL.—In carrying out this sec-  
14               tion, the Administrator shall ensure, to the max-  
15               imum extent practicable, that the presentation of in-  
16               formation on public health effects concerning any  
17               new or revised air quality standard is comprehensive,  
18               informative, understandable, and conveniently avail-  
19               able for public comment prior to the promulgation of  
20               any regulation under this Act.

21               “(2) SPECIFICATIONS.—The Administrator  
22               shall, in a document made available to the public in  
23               support of a regulation proposed or promulgated  
24               under this Act concerning an air quality standard,  
25               specify, to the maximum extent practicable—

1 “(A) each population addressed by any es-  
 2 timate of public health effects;

3 “(B) the expected risk or central estimate  
 4 of risk for the specific populations or resources,  
 5 where applicable, and each appropriate upper-  
 6 bound or lower-bound estimate of risk;

7 “(C) each significant uncertainty identified  
 8 in the process of the assessment of public  
 9 health effects, and studies that would assist in  
 10 resolving the uncertainty; and

11 “(D) peer-reviewed studies known to the  
 12 Administrator that support, are directly rel-  
 13 evant to, or fail to support any estimate of pub-  
 14 lic health effects, and the methodologies used to  
 15 reconcile inconsistencies in the scientific data.

16 “(3) HEALTH RISK REDUCTION AND COST  
 17 ANALYSIS.—

18 “(A) IN GENERAL.—As part of the process  
 19 of proposing a new or revised air quality stand-  
 20 ard, the Administrator shall publish in the Fed-  
 21 eral Register and seek public comment on an  
 22 analysis of each of the following:

23 “(i) Quantifiable and nonquantifiable  
 24 benefits for which there are factual bases  
 25 in the rulemaking record to conclude that

1 the benefits are likely to occur as the re-  
2 sult of actions taken to comply with the  
3 new or revised air quality standard.

4 “(ii) Quantifiable and nonquantifiable  
5 health benefits for which there are factual  
6 bases in the rulemaking record to conclude  
7 that the benefits are likely to occur from  
8 reductions in other related pollutants that  
9 may be attributed to compliance with the  
10 new or revised air quality standard, exclud-  
11 ing benefits resulting from compliance with  
12 other proposed or promulgated regulations.

13 “(iii) Quantifiable and nonquantifiable  
14 costs for which there is a factual basis in  
15 the rulemaking record to conclude that the  
16 costs are likely to occur as the result of ac-  
17 tions taken to comply with or attain the  
18 new or revised air quality standard, which  
19 costs shall include monitoring, actions  
20 taken to comply with or attain the new or  
21 revised air quality standard, and other  
22 costs, and excluding costs resulting from  
23 compliance with other proposed or promul-  
24 gated regulations.



1           “(iv) The incremental costs and bene-  
2           fits associated with each alternative new or  
3           revised air quality standard considered.

4           “(v) The effects of the air pollutant or  
5           pollutants for which a new or revised air  
6           quality standard is being considered on the  
7           general population, including, to the extent  
8           relevant and appropriate and where data  
9           are reasonably available, the effects on  
10          groups within the general population such  
11          as infants, children, pregnant women, the  
12          elderly, individuals with a history of seri-  
13          ous illness, or other subpopulations that  
14          are identified as likely to be at greater risk  
15          of adverse health effects due to exposure to  
16          an air pollutant than the general popu-  
17          lation.

18          “(vi) Any risk that may occur as the  
19          result of compliance with or attainment of  
20          the new or revised air quality standard, in-  
21          cluding risks associated with other related  
22          pollutants.

23          “(vii) Other relevant factors, including  
24          the quality and extent of the information  
25          available concerning the new or revised air

1           quality standard, the uncertainties in the  
 2           analysis supporting clauses (i) through  
 3           (vi), and factors with respect to the degree,  
 4           and quantitative and qualitative descrip-  
 5           tions of the nature, of any risk.

6           “(B) APPROACHES TO MEASURE AND  
 7           VALUE BENEFITS.—The Administrator may  
 8           identify valid approaches for the measurement  
 9           and valuation of benefits under this paragraph,  
 10          including approaches to identify consumer will-  
 11          ingness to pay for reductions in health risks  
 12          from air pollutants.

13          “(C) AUTHORIZATION OF APPROPRIA-  
 14          TIONS.—There is authorized to be appropriated  
 15          to the Administrator to conduct studies, assess-  
 16          ments, and analyses described in this section  
 17          \$35,000,000 for each of fiscal years 2000  
 18          through 2003.

19 **“SEC. 703. COST-BENEFIT ANALYSIS.**

20          “(a) DEFINITIONS.—In this section:

21           “(1) BENEFIT.—The term ‘benefit’ means the  
 22          reasonably identifiable significant favorable effects,  
 23          quantifiable and nonquantifiable, including social,  
 24          health, safety, environmental, and economic effects,  
 25          that are expected to result from implementation of,

1 or compliance with, a new or revised air quality  
2 standard.

3 “(2) COST.—The term ‘cost’ means the reason-  
4 ably identifiable significant adverse effects, quantifi-  
5 able and nonquantifiable, including social, health,  
6 safety, environmental, and economic effects, that are  
7 expected to result from implementation of, or com-  
8 pliance with, a new or revised air quality standard.

9 “(3) COST-BENEFIT ANALYSIS.—The term  
10 ‘cost-benefit analysis’ means an evaluation of the  
11 costs and benefits of a new or revised air quality  
12 standard, quantified to the extent feasible and ap-  
13 propriate and otherwise qualitatively described, that  
14 is prepared in accordance with the requirements of  
15 this section at the level of detail appropriate and  
16 practicable for reasoned decisionmaking on the mat-  
17 ter involved, taking into consideration uncertainties,  
18 the significance and complexity of the decision, and  
19 the need to adequately inform the public.

20 “(b) ANALYSIS.—For each new or revised air quality  
21 standard proposed, the Administrator—

22 “(1) shall conduct and publish, for public com-  
23 ment, a cost-benefit analysis to determine whether  
24 the benefits of the new or revised air quality stand-  
25 ard justify, or do not justify, the costs; and

1           “(2) may analyze the potential distributional ef-  
 2           fects of the new or revised air quality standard.

3           “(c) DETERMINATION OF HEALTH RISK REDUCTION  
 4           AND COST CONSIDERATIONS.—

5           “(1) DETERMINATION OF NO JUSTIFICATION  
 6           FOR COST.—

7           “(A) IN GENERAL.—Notwithstanding any  
 8           other provision of this Act, if the Administrator  
 9           determines, based on an analysis conducted  
 10          under subsection (b), that the benefits of a new  
 11          or revised air quality standard proposed or pro-  
 12          mulgated in accordance with this Act do not  
 13          justify the costs, the Administrator may, after  
 14          notice and opportunity for public comment, pro-  
 15          mulgate an alternative new or revised air qual-  
 16          ity standard at a cost that is justified by the  
 17          benefits.

18          “(B) SCOPE OF CONSIDERATION.—In mak-  
 19          ing a determination under subparagraph (A),  
 20          the Administrator shall consider—

21                 “(i) only public health benefits, with  
 22                 respect to a determination concerning a  
 23                 primary national ambient air quality  
 24                 standard; and

1                   “(ii) public health and environmental  
2                   benefits, with respect to a determination  
3                   concerning any air quality standard other  
4                   than a national ambient air quality stand-  
5                   ard.

6                   “(2) JUDICIAL REVIEW.—A determination by  
7                   the Administrator under paragraph (1)—

8                   “(A) shall be reviewed by a court only as  
9                   part of a review of a final regulation that has  
10                  been promulgated based on the determination;  
11                  and

12                  “(B) shall be set aside by a court if the  
13                  court finds that the determination is arbitrary  
14                  and capricious.

15                  “(d) AUTHORIZATION OF APPROPRIATIONS.—There  
16                  are authorized to be appropriated such sums as are nec-  
17                  essary to carry out this section.”.

○